

**CAIN & ASSOCIATES Engineers & Constructors Inc.**  
**3751 Cottage Hill Rd. Mobile, AL 36609 (251-661-2605)**

### **SUMMARY ENGINEERING REPORT**

**DATE OF INSPECTION:** 12/8/2004

**HOMEOWNER:** Don Bell

**ADDRESS:** 9030 County Road 59 Pineapple, AL.

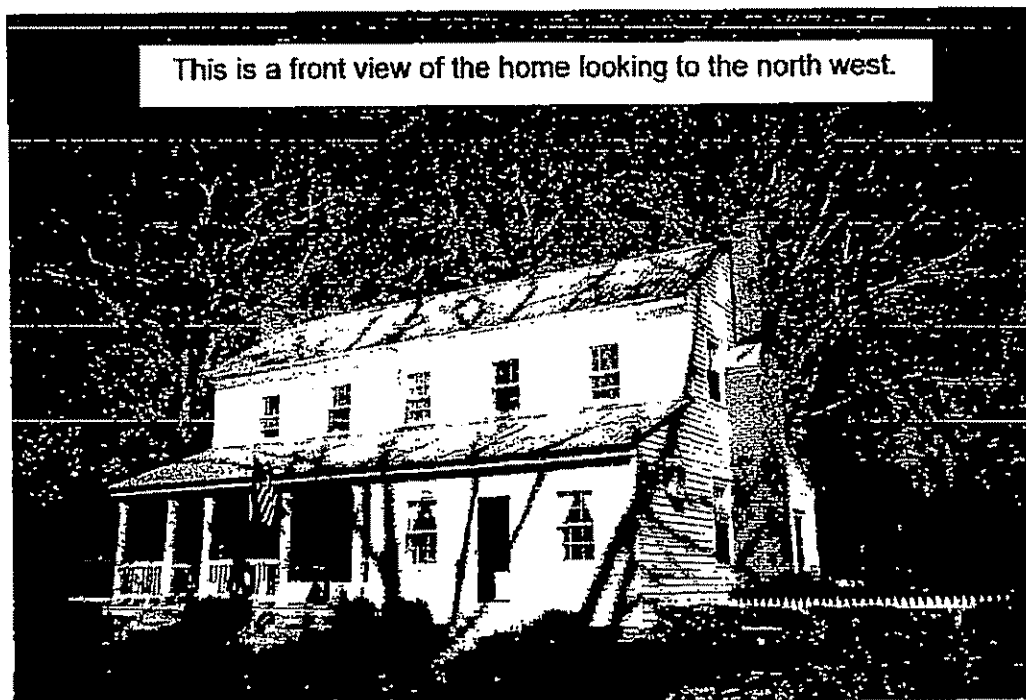
**NAME OF INSURANCE COMPANY:** Travelers

**PHONE NO.:** Home 334-335-3101 Work 334-335-3311

**CLAIM NO.:** L5K6586

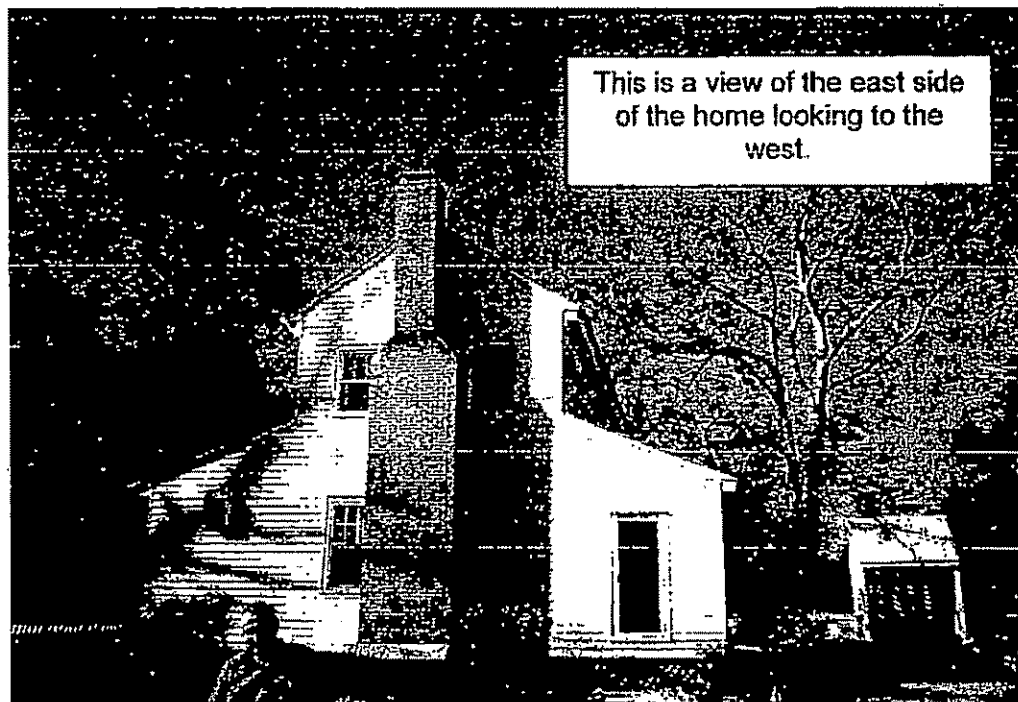
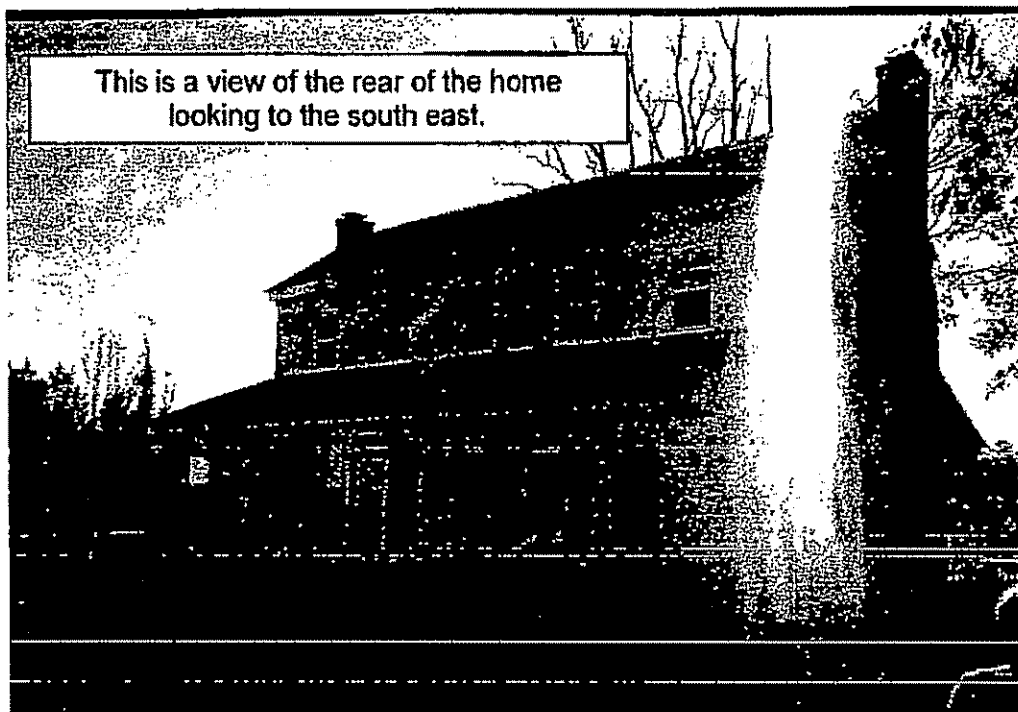
**DATE OF LOSS:** 9/16/04, HURRICANE IVAN

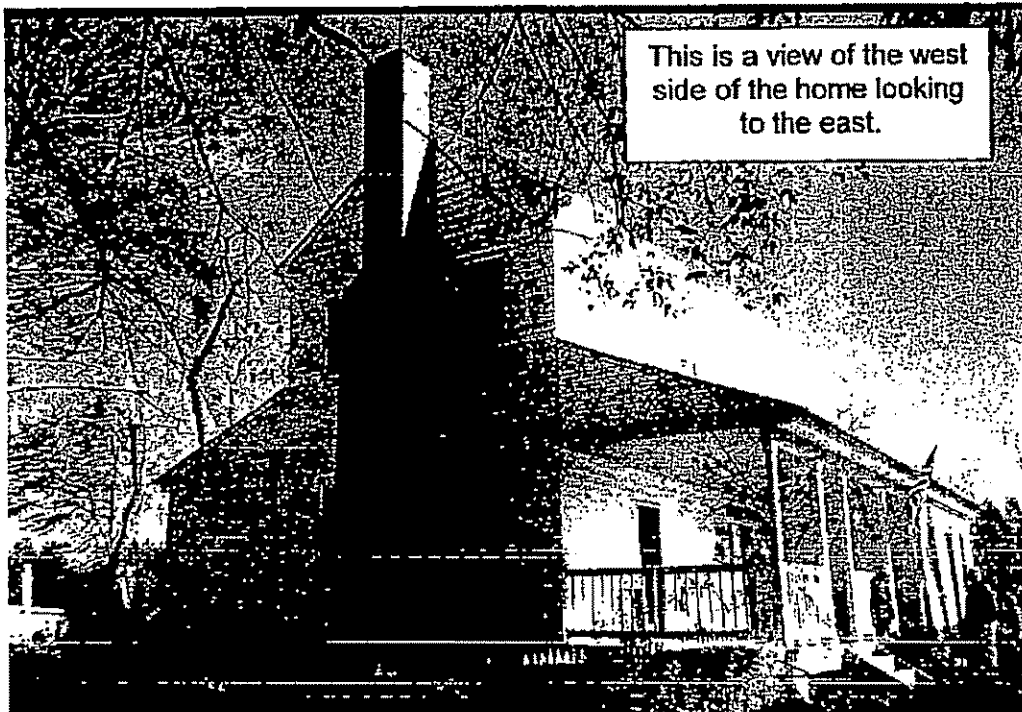
**BUILDING DESCRIPTION:** The home is a two story wood framed structure supported on stone piers and concrete block piers. The home has a metal roof and faces south. The home was constructed in the 1830's and underwent a major renovation 2 years ago. The following pictures provide some exterior views of the home.



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**FLOOD DAMAGE, WIND DAMAGE, and SETTLEMENT DAMAGE**  
**COMMENTS:** The home suffered no damage from flood. The home appears to have suffered no damage from settlement as a result of Hurricane Ivan; the home does appear to have settled a small amount along the north main bearing wall due to crushing of some termite damaged floor beams. The high wind loads from Hurricane Ivan caused the increased loading on the floor beams that caused them to crush. The wind from Hurricane Ivan caused a "lifting" of the metal roof that loosened the attachment screws. These loosened screws allowed rain to enter the home and damage the totally wood interior. The following pictures will detail some of the damages to the home. A plan of the main floor framing is included in the back of the report. This plan will show the approximate locations of the termite damage.

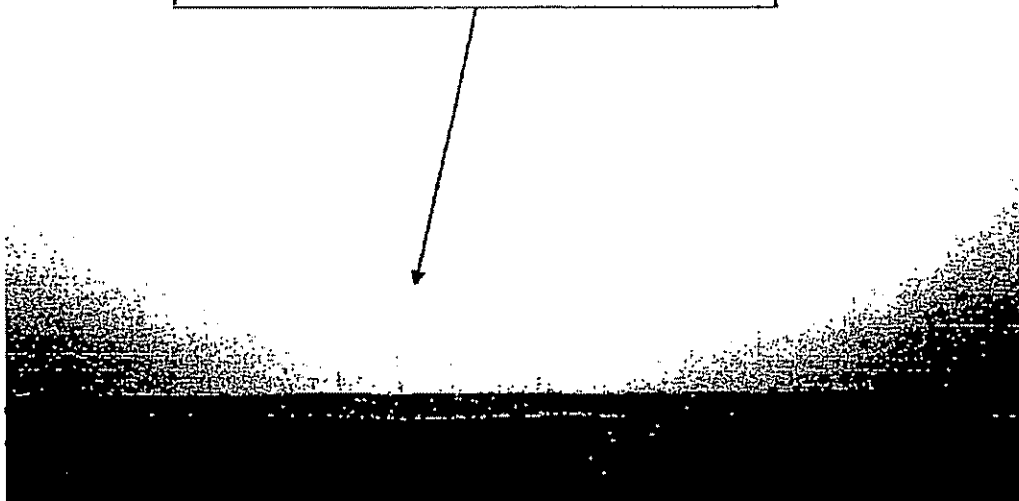
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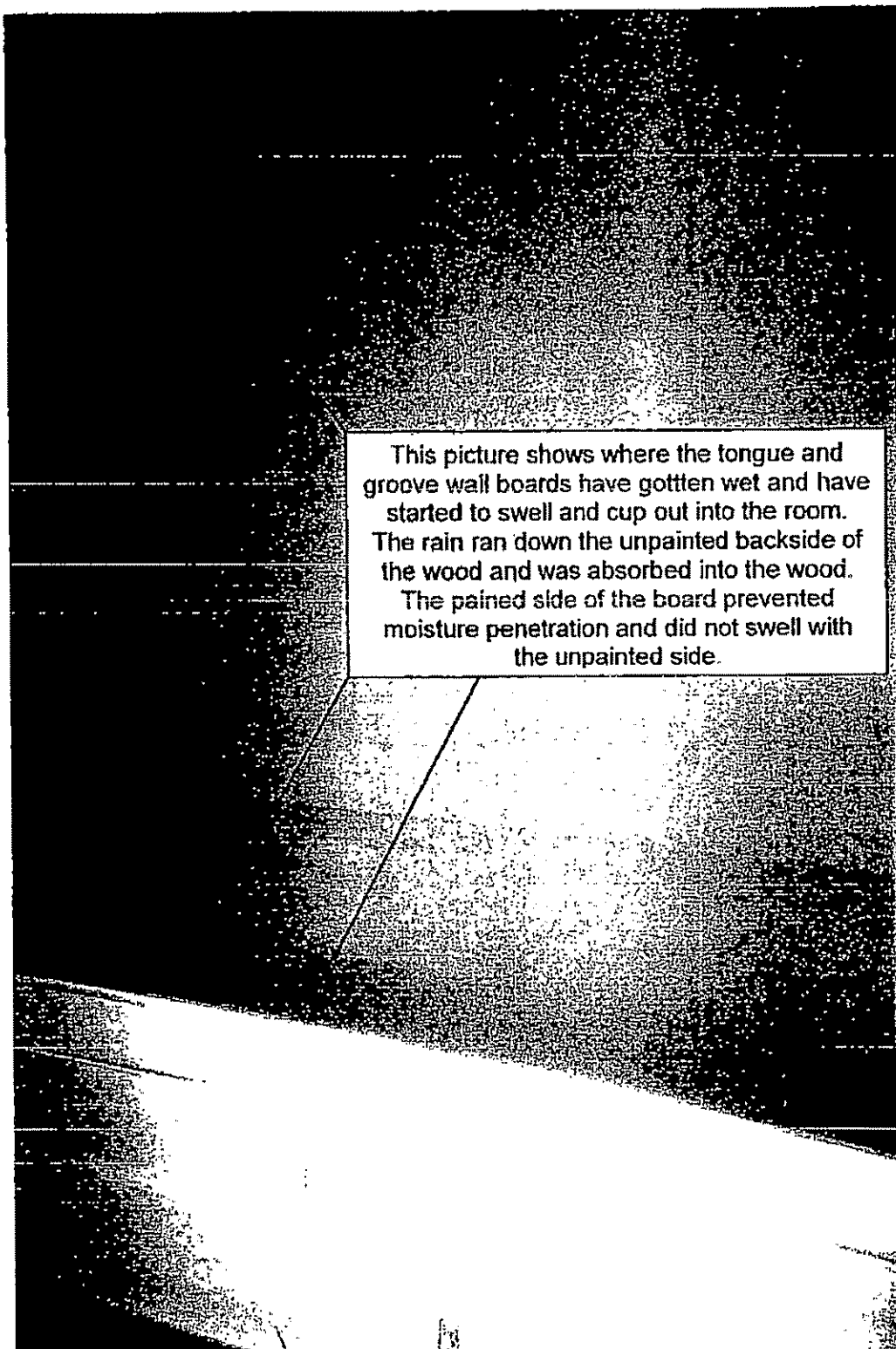
This picture shows some of the stains on the ceiling from the rain from Hurricane Ivan and the subsequent rains to this point. Even though the roof was damaged during Hurricane Ivan a temporary roof has not been installed to prevent additional damage.

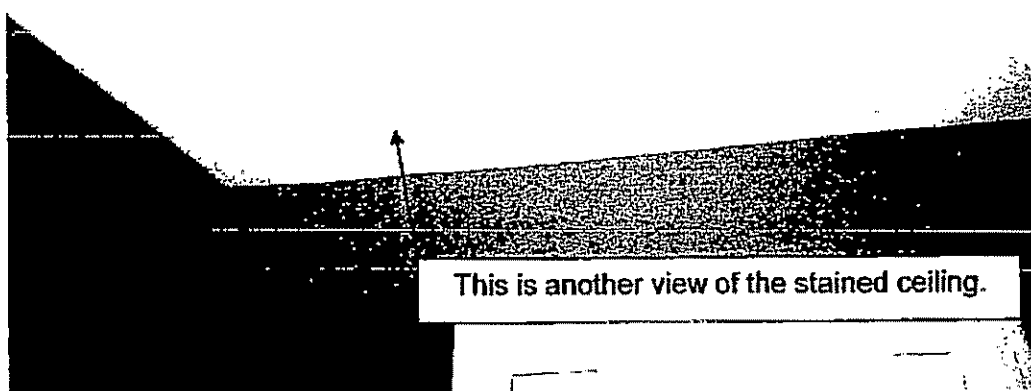
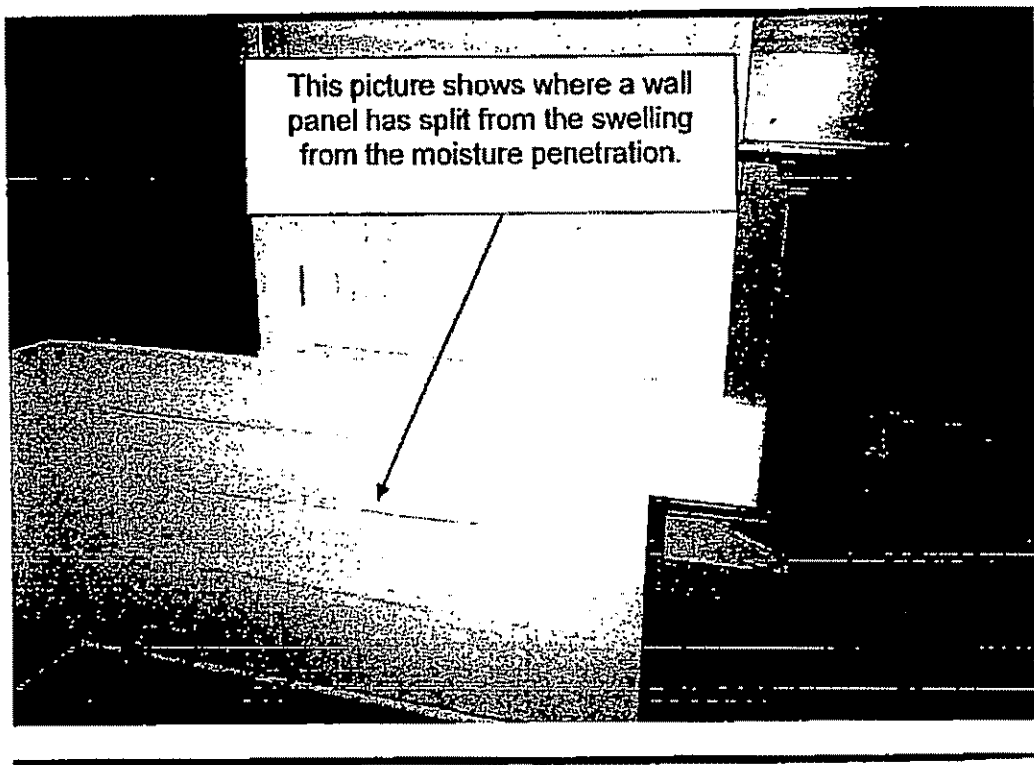


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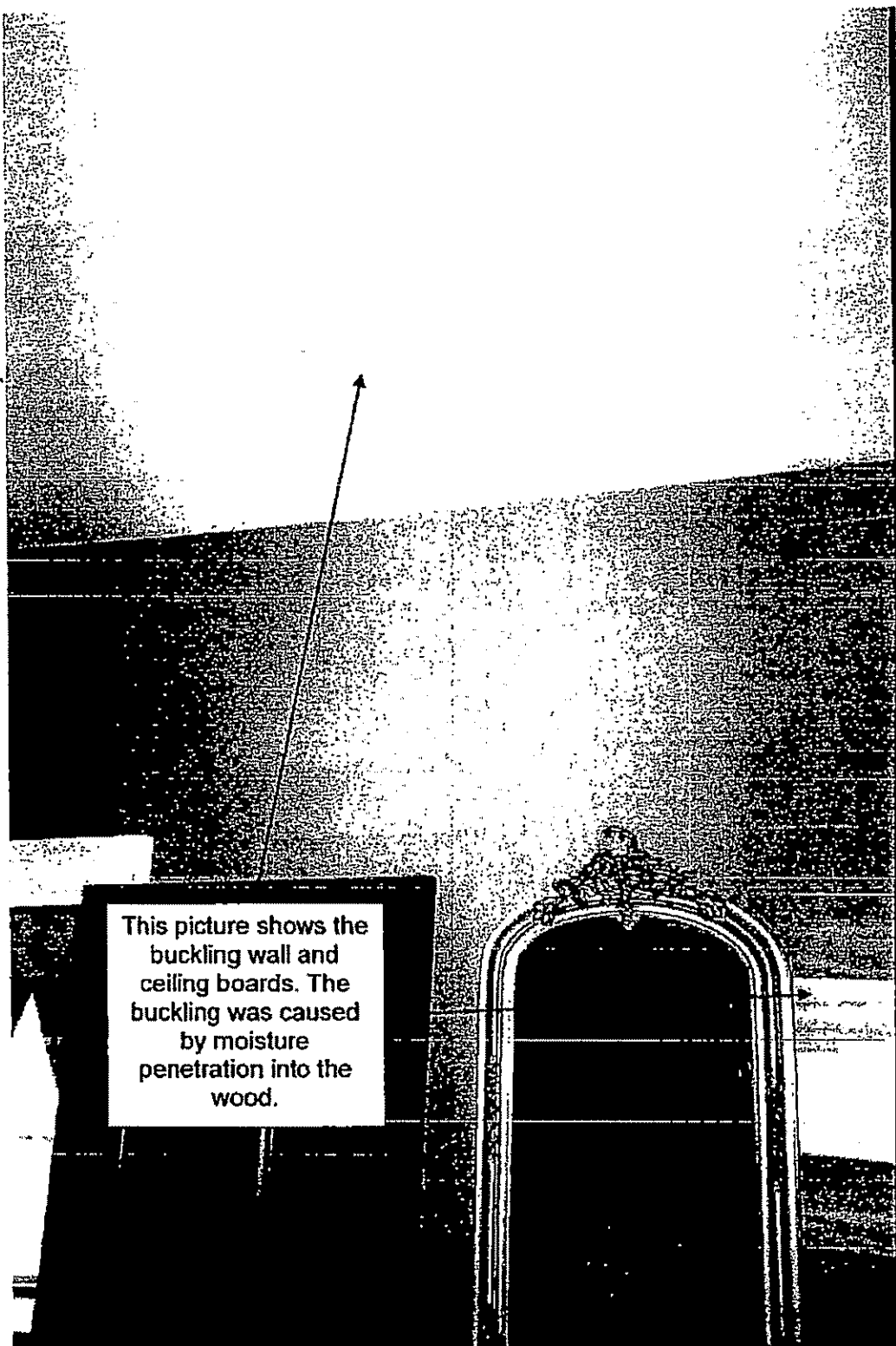
This is another view of ceiling stains in a different room of the home. This type of staining is common throughout the home.

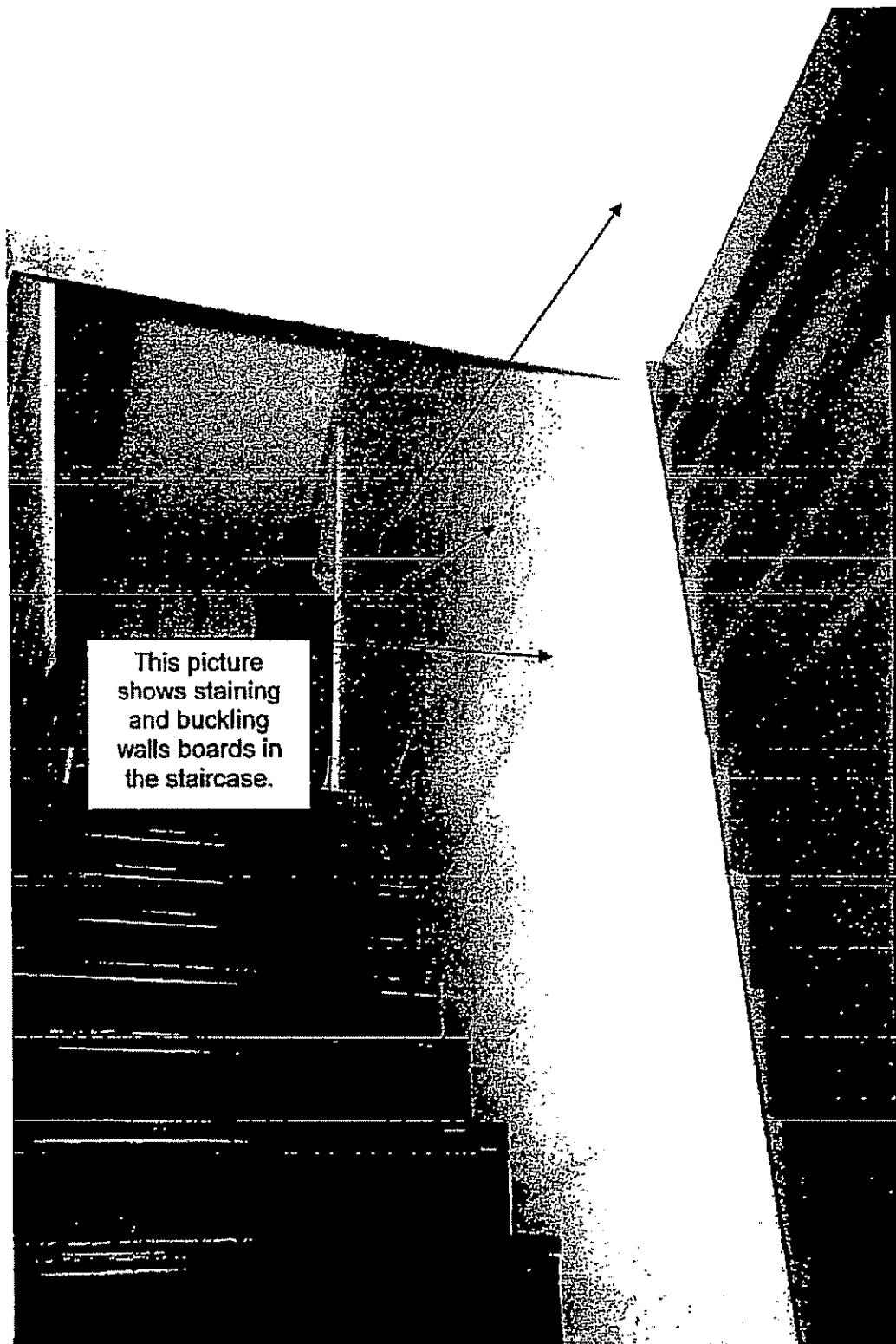




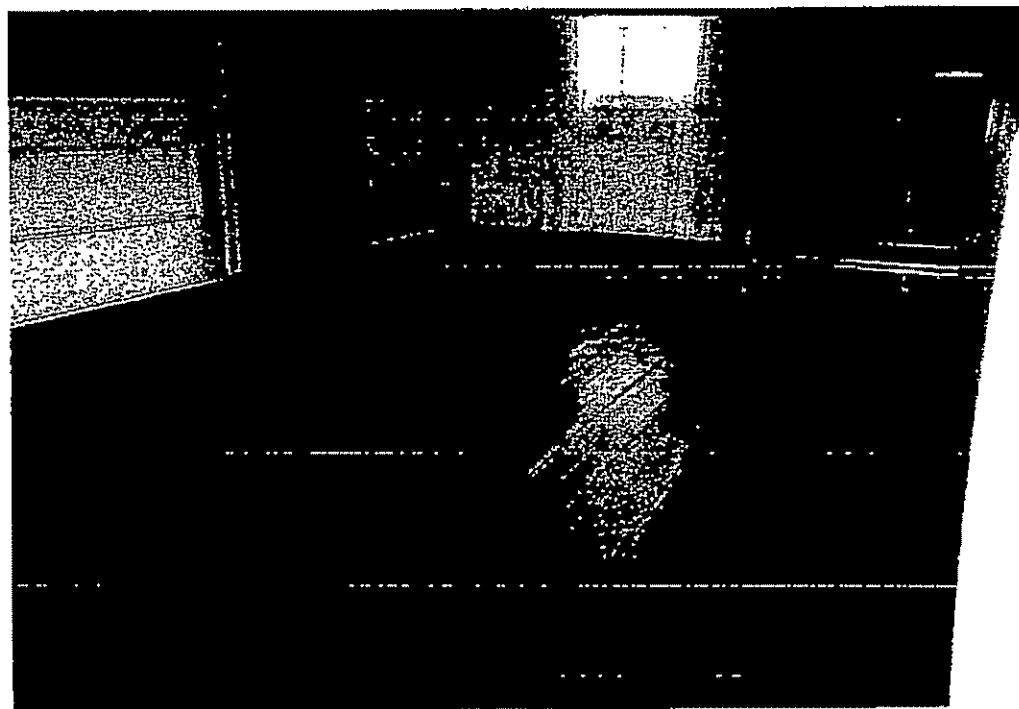
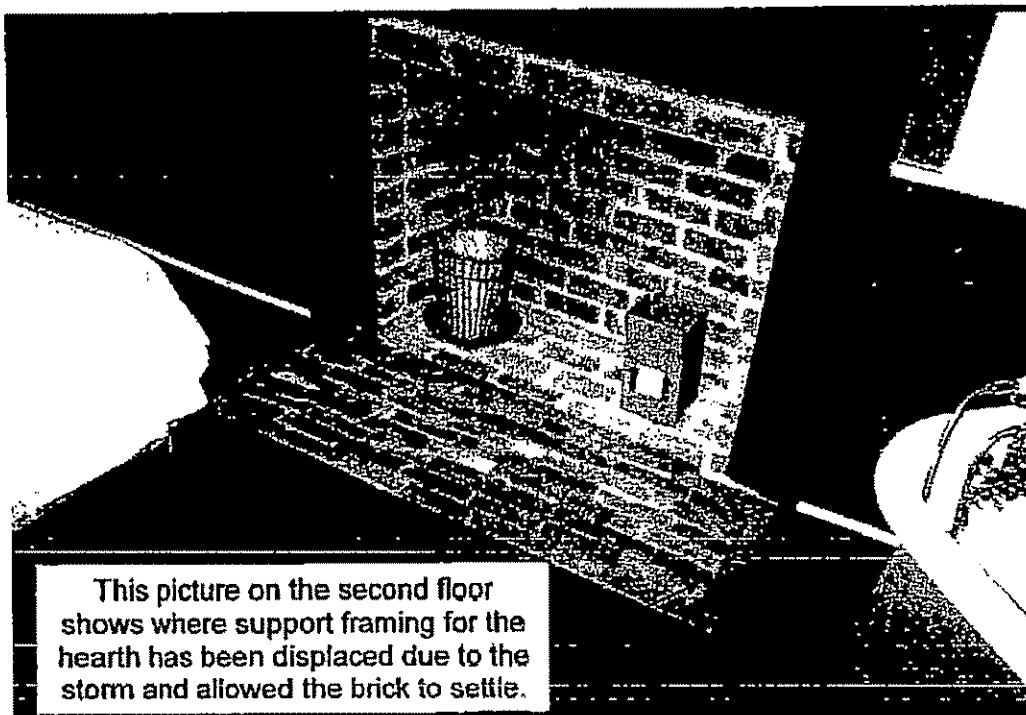






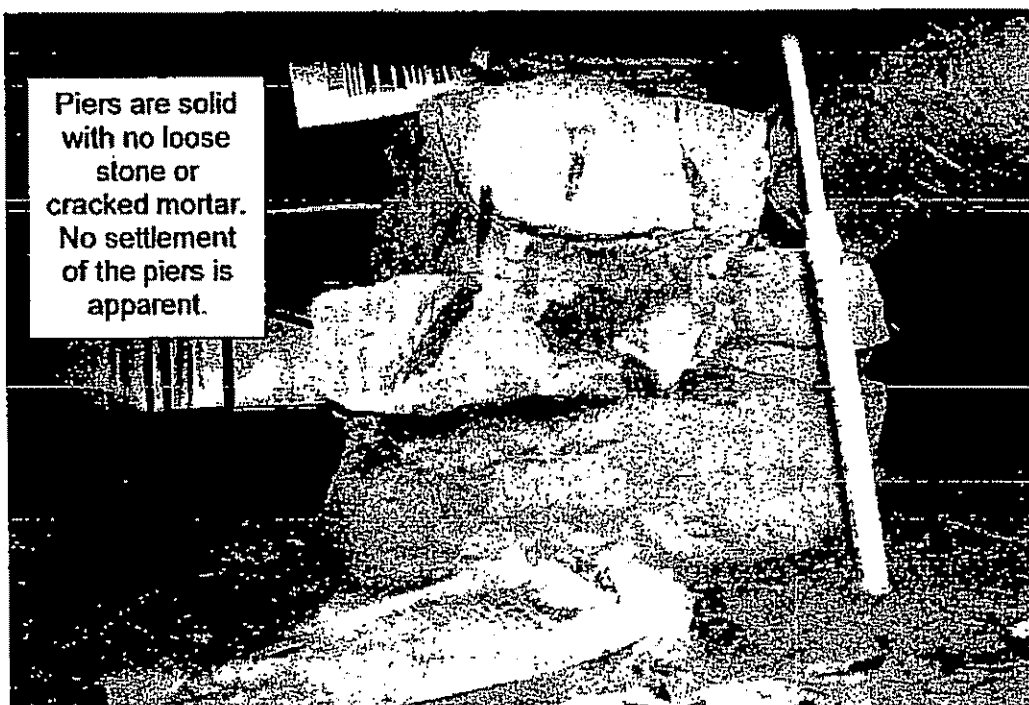
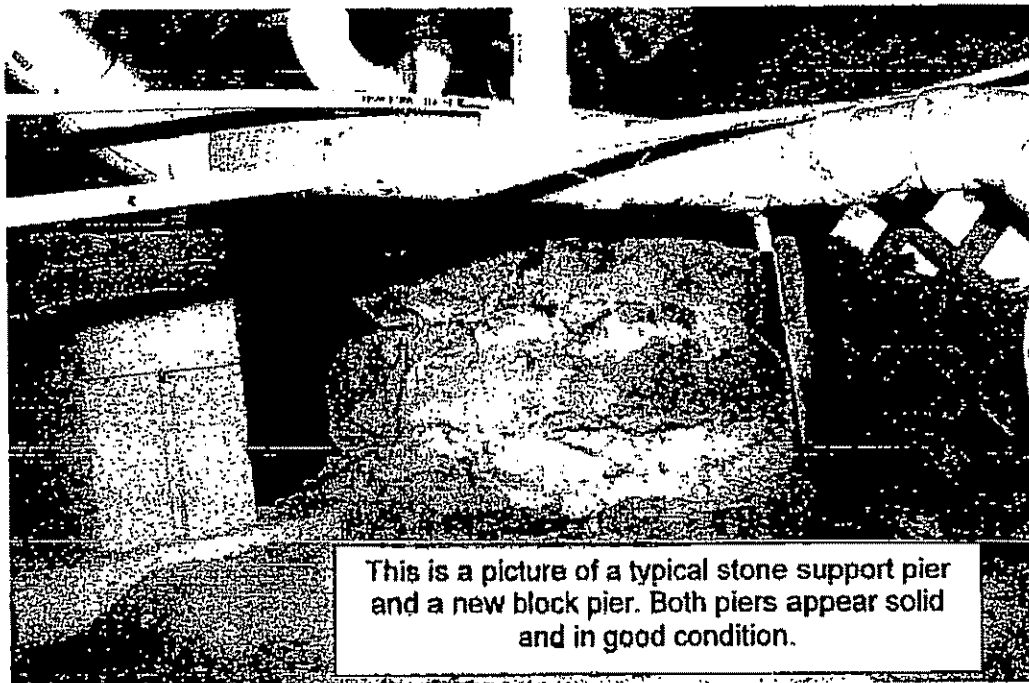


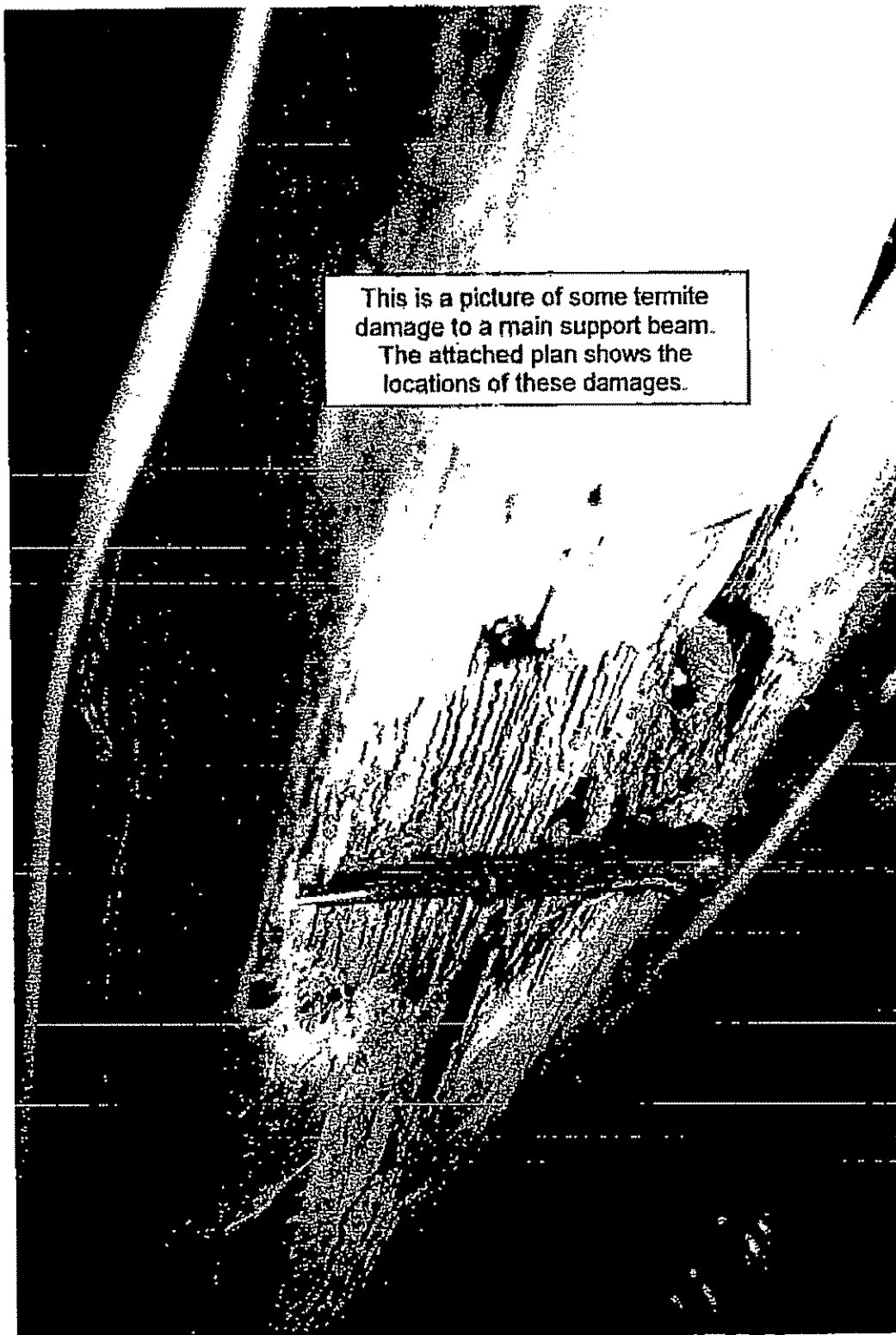


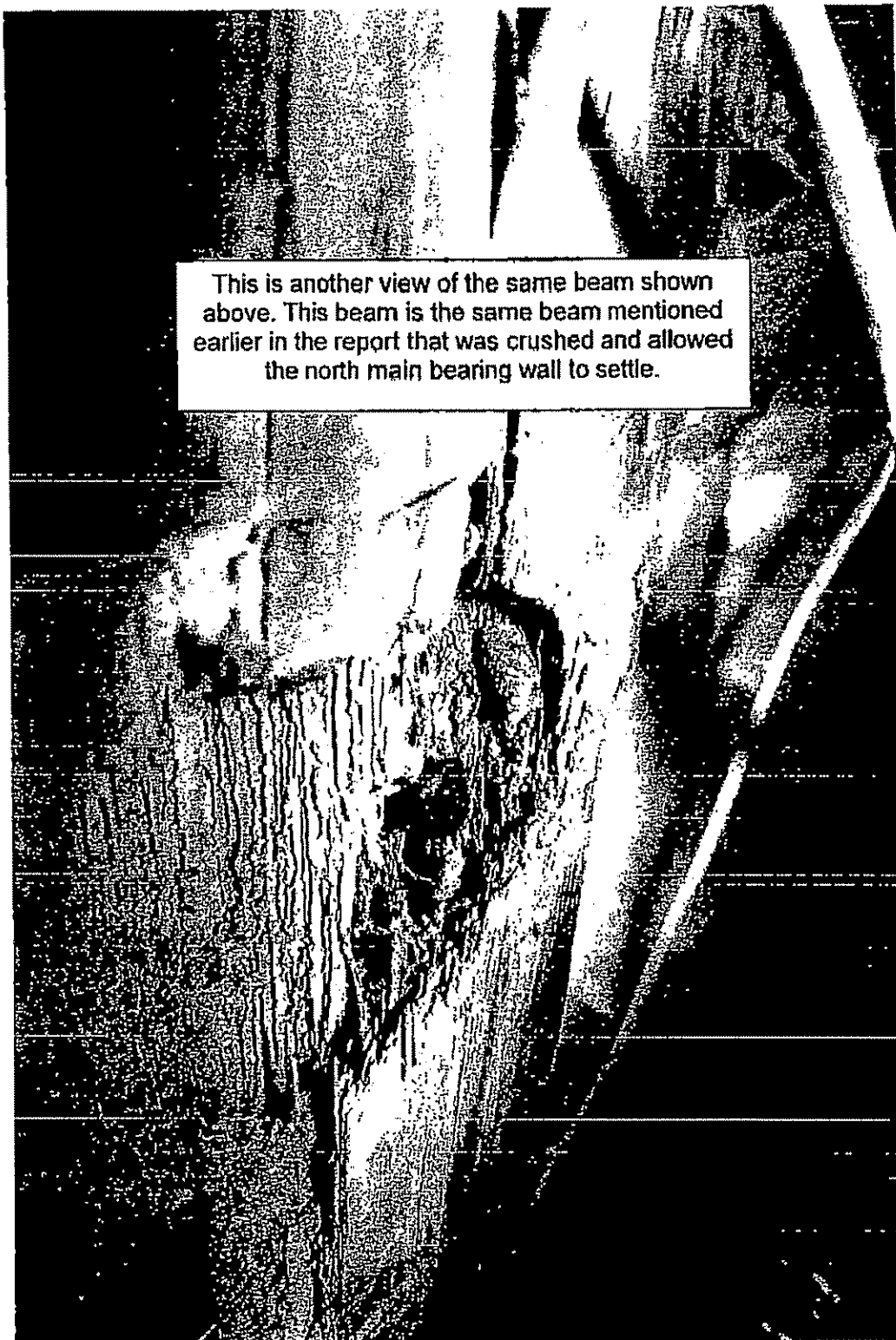


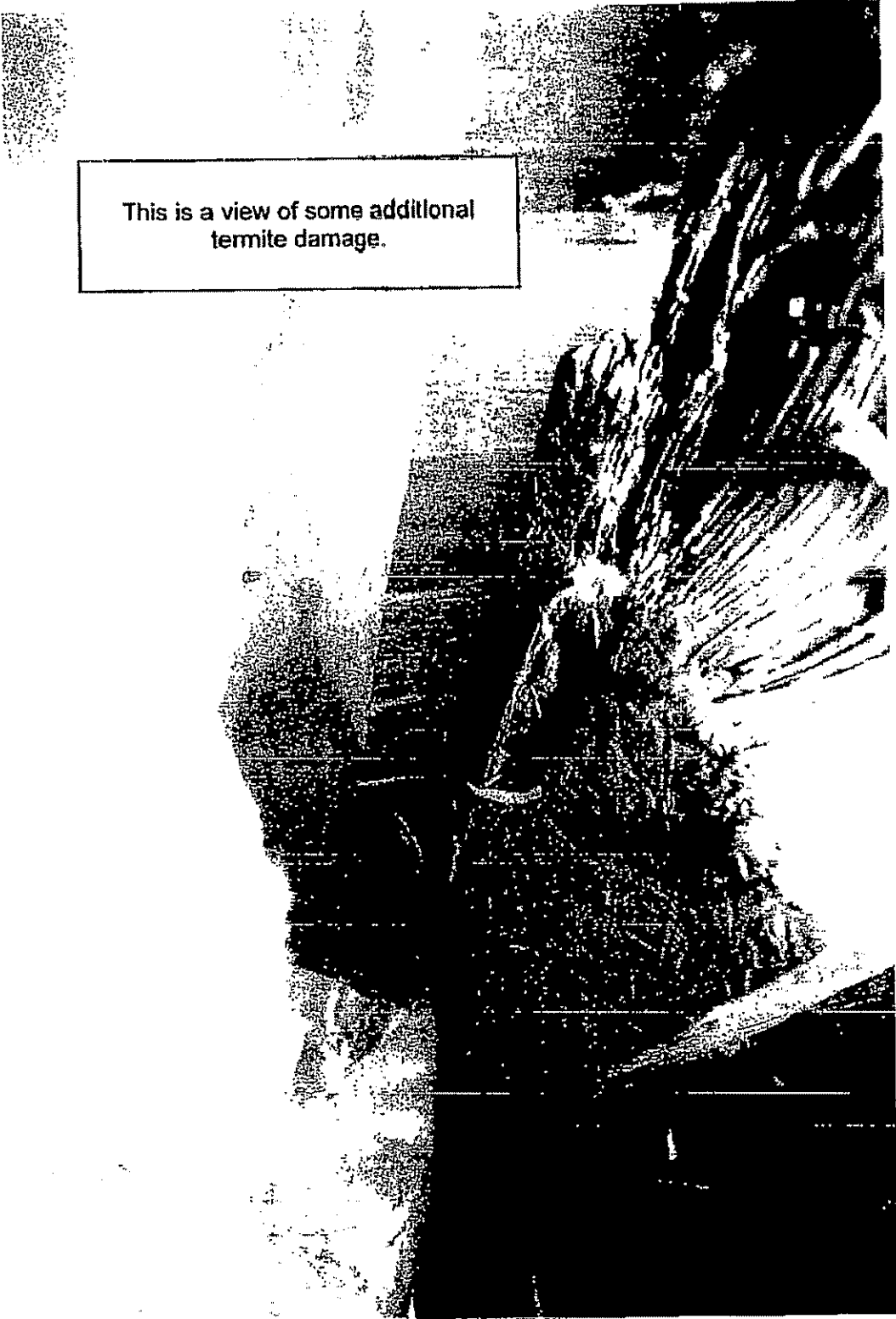
The picture above shows some warping of the floor boards on the first floor. Notice the lifting of the board along the wall at the left. The main support beam of

the north main bearing wall has suffered significant termite damage. The termites do not appear to be active at this time.



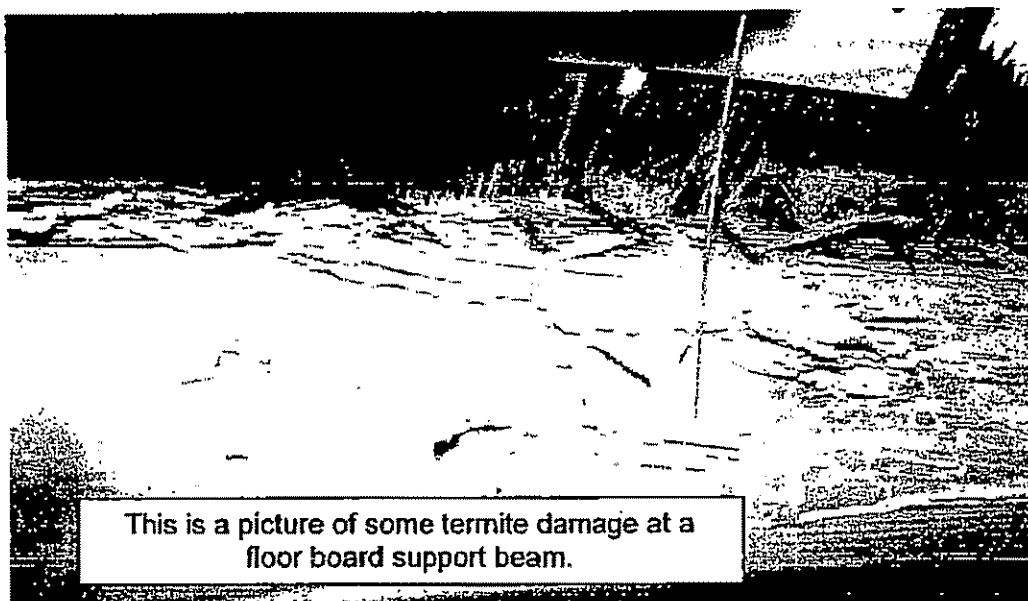






This is a view of some additional  
termite damage.





**BUILDING CODE VIOLATIONS:** N/A

**POOR CONSTRUCTION WORKMANSHIP ISSUE:** N/A

**CONCLUSIONS:** The metal roof of the home was damaged during the hurricane and has allowed moisture to enter the home and damage the ceiling, walls and floors. **It should be noted that no temporary roof has been installed to protect the home from further moisture damage.** This moisture damage includes staining, buckling and cupping of the wood ceiling, walls and floors. The repair for the buckled or cupped wood is to remove and plane the wood and then re-install or to replace the warped member with new material. We recommend, however, that the house be dried in with at least a temporary roof, and the hardwood walls, floors and ceilings be allowed to dry and season before work is performed on these materials. Some cupping may come out after the drying is complete. Moisture is still entering the house now because of the unprotected roof.

The two main rooms downstairs appear to slope to the north and west. The floors are sloping and the wall has settled due to termite weakened floor beams being "crushed" during the high wind loads from Hurricane Ivan. The repair for these weakened members is replacing the members or reinforcing the member with new material. The locations of these damaged members are shown on the attached floor plan.

Cain and Associates stands behind the findings of this report and reserves the right to add to or amend this report should new information be made available or discovered at a later date.

Signed: [Signature], Construction Inspector, Date: \_\_\_\_\_  
Signed: [Signature], Structural Engineer, Date: 12/14/07  
William C. Bridges AL PE 15260

